Member News

TMS e-Mentor Program Continues to Grow


Ben Poquette


Nitin Chopra

Two additional TMS members are offering their insights on career development strategies as TMS e-Mentors. Providing an industry perspective is Ben Poquette, president of Keystone Materials LLC. Nitin Chopra, assistant professor at the University of Alabama, can advise on career questions related to the academic sector. They join the inaugural TMS e-Mentor team of Thomas Battle, senior metallurgist, Midrex Technologies and current chair of the TMS Extraction & Processing Division Council; Chandler Becker, materials research engineer at the U.S. National Institute of Standards and Technology (NIST); Jeffrey Fergus, professor at Auburn University; and Robert D. Shull, group leader of the Magnetic Materials Group at NIST and 2007 TMS President.

Launched in November 2009, the TMS e-Mentor program is a new member benefit designed to meet the career development needs of students and young professionals, while also providing an additional networking opportunity to those more established in their careers. The latest addition to the suite of resources available through the TMS Job and Financial Security Resource Center, the TMS e-Mentor program offers the opportunity to conveniently and confidentially pose questions to an experienced TMS member on day-to-day or long-term career issues.

To begin using the TMS e-Mentoring Program, log on to the Members Only home page and select "e-Mentor Program."

TMS Welcomes New Members

At its October meeting, the TMS Board of Directors approved a slate of 34 new members representing 11 countries and an array of materials science and engineering disciplines. Please join us in congratulating these individuals as they begin to explore the many personal and professional growth opportunities offered to them as full members of TMS:

- Thomas L. Aldrich: ASARCO LLC, Tucson. Arizona.
- Iyad Talal Alzaharnah: KFUPM, Dhahran, Saudi Arabia.
- Lynn H. Baldwin: Fort Worth, Texas.
- Richard S. Bradley Jr.: CQE Systems, Inc., Wheaton, Illinois.
- Renee Downie: The Equity Engineering Group, Inc., Houston, Texas.
- Michael Driver: McKeesport, Pennsylvania.
- Oladapo O. Eso: ATI Engineered Products, Huntsville, Alabama.
- Janardhan Gangojirao: Shimoga Karnataka, India.
- Jicheng Gong: University of Oxford, United Kingdom.
- Isaias Almaguer Guzman: Servicios Indust Penoles SA CV, Torreón, Mexico.
- Eugene E. Haller: University of California, Berkeley.
- Vincent H. Hammond: Army Research Labs.
- Xiaohua Hu: McMaster University, Ontario, Canada.
- Mitsuo Ishii: Nippon Steel Corporation, Tokyo, Japan.
- Jagannadham Kasichainula: North Carolina State University, Raleigh.
- James E. Krzanowski: University of New Hampshire, Durham, New Hampshire.
- Fiona Levey: Northborough, Massachusetts.
- Xinping Liang: GCL Holding Company Ltd.
- Freddy O. Martinez: KB Alloys LLC, Robards, Kentucky.
- Nelida Mingolo: Universidad de Buenos Aires, Argentina.
- Peter D. Moran: Michigan Technological University, Houghton, Michigan.
- Renee Pedrazzani: University of Rochester, New York.
- Mihriban O. Pekguleryuz: McGill University, Montreal, Canada.
- Charles A. Pitzer: Pitzer Consulting, El Segundo, California.
- Siba P. Ray: Alcoa, New Kensington, Pennsylvania.
- Rodney G. Riek: Harley Davidson Motor Co., Wauwatosa, Wisconsin.
- Ralph R. Sawtell: Alcoa, Cleveland, Ohio.
- Tania M. Slawecki: The Pennsylvania State University, University Park.
- Oleksandr Vasylyev: Institute for Problems of Materials Science, Kyiv, Ukraine.
- Hakon Viumdal: Tel-Tek, Porsgrunn, Norway.
- Hong Nguyen Vu: Institute of Chemical Technology, Prague 6, Czech Republic.
- Mingxu Xia: BCAST, London, United Kingdom.
- Hideyuki Yasuda: Osaka University, Japan.
- Jiaming Zhang: Ann Arbor, Michigan.

Jeffrey Wadsworth Receives 2009 National Materials Advancement Award

Jeffrey Wadsworth, Battelle Memorial Institute president and chief executive officer and TMS Fellow, received the 2009 National Materials Advancement Award from the Federation of Materials Societies at a reception on December 9. The award was conferred on Wadsworth for the major role that he has played in national science and technology policy, with a particular emphasis on the role and contributions of materials science and engineering.

Meet a Member: Xingbo Liu: TMS' "Energetic" 2010 Early Career Faculty Fellow

By Lynne Robinson

Xingbo Liu's career path was revealed to him in the blink of an eye.

He was on a high school field trip to the Institute of Metal Research, about a mile from his home in Shenyang, northeastern China, when he peered through a transmission electron microscope (TEM) for the first time. "I remember seeing materials down to the atom scale and thinking, 'That's so cool.' Then, I thought, 'I want to do that,'" he recalled. "It was amazing to see something so tiny."

It was little wonder that Liu was taken with the view through the TEM. With his father's being a mechanical engineer and his mother a metallurgist, the lure of materials science was almost a genetic predisposition. His pursuit of "the cool" initially took him to the University of Science and Technology, Beijing, where he was ultimately drawn to research superalloys for jet engine turbines. "It was just really exciting for me to be able to help make something that could fly," he said.

Now an assistant professor in the Mechanical and Aerospace Engineering Department at West Virginia University, Liu has turned his attention to something that he finds not only exciting, but also urgently needed—the development of sustainable sources of energy. Since joining TMS in 2002, he has worked diligently to "broaden awareness of new materials in new areas, such as renewable energy sources and fuel cells." Currently the JOM advisor for the Energy Committee, Liu is also vice chair of the High Temperature Alloys Committee and was a founding member of the TMS Energy Conversion and Storage Committee. This year marks two new milestones in his TMS involvement. He is a lead symposium organizer for the first time at the TMS 2010 Annual Meeting, namely for Materials in Clean Power Systems V: Clean Coal-, Hydrogen Based-Technologies, Fuel Cells, and Materials for Energy Storage. And, he was named the 2010 TMS Early Career Faculty Fellow.

As a requirement of the Early Career Faculty Fellow award, Liu is presenting the TMS Young Leader Tutorial Luncheon Lecture at the Annual Meeting and, not surprisingly, his topic is "Energy Materials—Past, Present, and Future." Said Liu, "I'm going to make this fun. I plan to present a picture about how energy use has evolved, from ancient India, to the invention of the steam engine, to the impact of high temperature, nickel-based alloys and the development of high efficiency fuel cells. I want to encourage broad interest in the topic so that the audience will want to learn the details on their own."

As for the Materials in Clean Power Systems V symposium, Liu said that he is particularly pleased that this year's program features a strong energy storage component, focused primarily on energy conversion and generation.

The larger context for Liu's scientific interests is currently shaped by his 18-month-old son, Ethan—"My new inspiration," he notes. An avid reader of philosophical works, Liu is particularly intrigued by the contributions of Bertrand Russell, considered a founder of analytic philosophy. "To me, philosophy is like reading a review paper about the universe," he said. "Every time I study it, I find something new. It challenges me and keeps me from just focusing on what is going on today."

Occasionally, Liu also finds time to play tennis, although since Ethan's birth, he admits to "playing more Wii tennis." His wife, Li Zhao, first taught him the sport in China in the late 1990s. "I started playing tennis with my friends and they became frustrated with me because I was a beginner and they wanted to play more competitive games. They said, 'We know someone who is more patient who can teach you,' and that's how I met my wife. She taught me for half a year and then we started dating. Then she lost her patience.

"She never did teach me how to serve."

Figure 1: Liu with his son, Ethan—"My new inspiration"—as they hike Mary's Peak on the Oregon Coast.

Lynne Robinson is a news and feature writer for TMS.

Each month, *JOM* profiles a TMS member and his or her activities both in and out of the realm of materials science and engineering. To suggest a candidate for this feature, contact Maureen Byko, *JOM* editor, at *mbyko@tms.org*.